

***PSEUDOTSUGA MENZIESII – ABIES GRANDIS /  
FESTUCA OCCIDENTALIS***

Douglas-fir – grand fir / western fescue  
Abbreviated Name: PSME-ABGR/FEOC

Sample size = 6 plots

**DISTRIBUTION:** Known only from San Juan County.

**GLOBAL/STATE STATUS:** G2S2. There are very few good condition occurrences of this association and it occupies small areas and a small geographic range. Though it is rare and local, this type may be more common than it was during the pre-Western settlement era because of increases in area due to fire suppression and succession. It may also occur in British Columbia.

**ID TIPS:** Grand fir occupies >10% cover or is the dominant tree regeneration and western hemlock and western redcedar are either absent or minor in importance. Western fescue >1%. Salal, sword fern, and snowberry relatively minor or absent. Understory usually dominated or co-dominated by herbaceous vegetation. Refer to key.

**ENVIRONMENT:** These sites are dry and appear to be poor to medium in nutrients. Slopes are usually gentle to moderate. Upper slopes are most common. Parent materials are glacial till or residuum. Soils are likely to be somewhat shallow. Found only in dry climatic areas.

Precipitation: 21-29 inches (mean 25)  
Elevation: sea level - 650 feet  
Aspect/slope: various/ 3-54% (mean 19)  
Slope position: upper, mid, plain, short  
Soil series: Roche, Rockland, Pickett

**DISTURBANCE/SUCCESSION:** Fire is the primary natural disturbance. Grand fir is expected to increase over time in the absence of disturbance. Evidence suggests that many of these stands were Douglas-fir savannas prior to fire suppression and have increased dramatically in tree density since pre-Western settlement.

**VEGETATION:** Canopy is dominated by Douglas-fir or co-dominated by that species and grand fir. Grand fir is always

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**Vegetation Composition Table (selected species):**

Con = constancy, the percent of plots within which each species was found;  
Cov = cover, the mean crown cover of the species in plots where it was found;  
+ = trace (< 0.5% cover).

Trees	Kartesz 2005 Name	Con	Cov
Douglas-fir	Pseudotsuga menziesii var. menziesii	100	59
grand fir	Abies grandis	100	30
Pacific madrone	Arbutus menziesii	50	2
<b>Shrubs and Dwarf-shrubs</b>			
baldhip rose	Rosa gymnocarpa	100	5
hairy honeysuckle	Lonicera hispidula	83	2
oceanspray	Holodiscus discolor	50	6
common snowberry	Symphoricarpos albus var. laevigatus	50	2
trailing blackberry	Rubus ursinus ssp. macropetalus	50	1
dwarf Oregongrape	Mahonia nervosa	33	15
orange honeysuckle	Lonicera ciliosa	33	+
<b>Graminoids</b>			
western fescue	Festuca occidentalis	100	8
Columbia brome	Bromus vulgaris	83	2
Alaska oniongrass	Melica subulata	83	12
Coast Range fescue	Festuca subuliflora	33	3
<b>Forbs and Ferns</b>			
western starflower	Trientalis borealis ssp. latifolia	100	6
mountain sweet-cicely	Osmorhiza berteroi	100	1
cleavers	Galium aparine	83	3
bracken fern	Pteridium aquilinum var. pubescens	67	5
sword fern	Polystichum munitum	67	2
sweet-scented bedstraw	Galium triflorum	67	1
rattlesnake-plantain	Goodyera oblongifolia	67	1
wall lettuce	Mycelis muralis	50	1
pathfinder	Adenocaulon bicolor	50	+
small-flowered nemophila	Nemophila parviflora var. parviflora	50	+
Pacific sanicle	Sanicula crassicaulis var. crassicaulis	50	+
twinflower	Linnaea borealis ssp. longiflora	33	8
Scouler's bellflower	Campanula scouleri	33	+
woods strawberry	Fragaria vesca ssp. bracteata	33	+
white-flowered hawkweed	Hieracium albiflorum	33	+
hairy cat's-ear	Hypochaeris radicata	33	+

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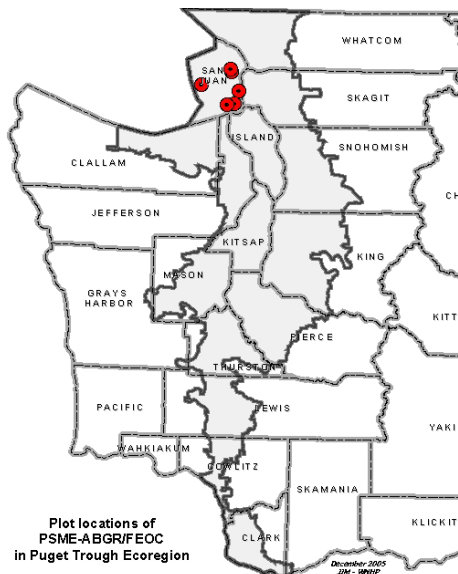


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present and often dominates tree regeneration. Douglas-fir regeneration can also be numerous. The shrub layer is usually sparse to moderate in density. Baldhip rose and hairy honeysuckle are usually present. Oceanspray, trailing blackberry, and common snowberry are in half the plots. Dwarf Oregongrape dominates the understory of one plot. The herb layer is usually well developed. Western fescue and Alaska oniongrass are usually prominent to co-dominant. Western fescue is always present. Western starflower (occasionally prominent), Columbia brome, mountain sweet-cicely, cleavers, bracken fern (occasionally prominent), sword fern, sweet-scented bedstraw, and rattle-snake-plantain are usually present.

**CLASSIFICATION NOTES:** Not previously described in the literature. Chappell (1997) considered it part of PSME-ABGR/SYAL/MESU. NatureServe (2005) currently considers it part of PSME-ABGR/SYAL/MESU, though it is slated to be elevated to an association called PSME-ABGR/FEOC-MESU.

**MANAGEMENT NOTES:** These sites appear to be relatively low in productivity for tree growth.



Chappell, C.B. 2006. Upland plant associations of the Puget Trough ecoregion, Washington. Washington Department of Natural Resources, Natural Heritage Program, Olympia, WA. [<http://www.dnr.wa.gov/nhp/refdesk/communities/pdf/intro.pdf>].